

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Office Action dated 7 February 2008. Responsive to the Office Action, Claim 7 has been amended and Claims 12-15 were previously canceled. Upon entry of this Amendment, Claims 7-10 will be pending.

In the Office Action, the Examiner rejected Claims 7-10 under 35 U.S.C. § 103(a) as being unpatentable over Burrell, et al. (U.S. Patent 5,454,886) in view of Kelly, et al. (Vacuum 2000, 56, 159-172). In setting forth the rejection, the Examiner acknowledged that Burrell, et al. fails to disclose a method wherein an anti-microbial sanitary ware is made using closed field unbalanced magnetron sputtering. The Examiner, however, cited Kelly, et al. for disclosing such and concluded that it would have been obvious to one of ordinary skill in the art to have incorporated as much into the Burrell, et al. method, because the Kelly, et al. reference disclosed the use of closed field unbalanced magnetron sputtering techniques.

As newly-amended independent Claim 7 now more clearly recites, Applicant's method for forming an anti-microbial sanitary ware includes the step of applying a negative biased voltage of greater than -80V to the substrate." Including the step of applying a negative bias voltage of greater than -80V to the substrate has the distinct advantage of limiting the thickness of the anti-microbial metal layer. By limiting the thickness of the anti-microbial metal layer, costs

associated with manufacturing the anti-microbial ware can be controlled. Additionally, applying a negative bias voltage of greater than -80V to the substrate increases the life of the product. Specifically, if the silver film is sputtered onto the substrate is too thick, the silver film will flake off and render the anti-microbial effects of the product useless.

The full combination of these and other features now more clearly recited by Applicant's pending Claims is nowhere disclosed by the cited reference. Note in this regard that the Burrell, et al. reference specifically discloses a bias of -100V as shown in Example 8. (Burrell, et al., column 16, lines 1-24). Moreover, as shown in Example 8, when a bias of -100V is used a "[f]ilm thickness of about 4,000 Angstroms [was] produced." (Burrell, et al., column 16, lines 19-20). To the contrary, the method disclosed in the subject Patent Application yields an antimicrobial layer that is less than 100 nanometers in thickness. (See Specification, page 4, lines 11-12). Thus, as the Burrell, et al. reference fails to disclose or suggest a method for making an anti-microbial sanitary ware "... wherein a negative biased voltage of greater than -80V is applied to said substrate ..." as is now claimed in newly-amended independent Claim 7, the Burrell, et al. reference cannot anticipate the invention as now claimed.

Given such deficient and contrary teachings of the primarily-cited Burrell, et al. reference, the teachings of the secondarily-cited Kelly, et al. reference are found to be quite ineffectual to the present patentability analysis. The Examiner

merely cited Kelly, et al. for disclosing the use of closed field unbalanced magnetron sputtering techniques. The reference, however, fails to remedy the deficiencies of the Burrell, et al. reference. It is respectfully submitted, therefore, that the cited Burrell, et al. and Kelly, et al. references, even when considered together, fail to disclose the unique combination of features now more clearly recited by Applicant's pending Claims for the purposes and objectives disclosed in the Patent Application.

It is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

If there are any further charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectfully submitted,
For: ROSENBERG, KLEIN & LEE


Morton J. Rosenberg
Registration #26,049

Dated: 6/5/08

Suite 101
3458 Ellicott Center Drive
Ellicott City, MD 21043
(410) 465-6678
Customer No. 04586